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COMPLETE LISTING OF PENDING CLAIMS

1. - 10. (Cancelled)

11. (Currently amended) An automatic maintenance requesting communications network system comprising at least one transaction terminal and at least one maintenance terminal; whereby when a maintainer logs in to the maintenance terminal an intelligent agent service program is sent to the transaction terminal to convey information about the maintainer and about the network address of the maintenance terminal to the service agent registry, so that in the event of a malfunction the transaction terminal is able to send an intelligent agent alert program conveying a maintenance request to the maintenance terminal,

~~An automatic maintenance requesting communications network system according to claim 10,~~

wherein the maintainer information includes details for ranking the priority of the maintainer, so that in the event of a malfunction the intelligent agent alert program is sent first to the maintainer having the highest priority.

12. (Original) An automatic maintenance requesting communications network system according to claim 11, wherein if the maintainer having highest priority fails to respond to the

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intelligent agent alert program within a predetermined time period, the alert agent travels to the maintainer with the next highest priority.

13. - 31. (Cancelled)

32. (Original) A method of servicing an electronic device interconnected over a network that includes sending a registration message to the device over the network when an authorized service representative logs on to the network, informing the device of the network address of the service representative, and storing the address within the device to enable notification to be sent to the service representative in the event of a designated operating condition.

33. (Original) A method of servicing an electronic device interconnected over a network that includes sending a registration message to the device over the network when the device initializes, informing the device of the network address of an authorized service representative already logged on to the network, and storing the address within the device to enable notification to be sent to the service representative in the event of a designated operating condition.

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34. (Original) A method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition, and informing the device when the representative logs off the network or becomes otherwise unavailable to perform required services.

35. - 73. (Cancelled)

74. (Original) A method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the communication is made to allow a service person to decide whether or not to accept responsibility for correcting a state condition that has occurred within the device.

75. - 80. (Cancelled)

81. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction

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terminal element, and in which a servicing person's terminal notifies the transaction terminal element in the event that the associated servicing person accepts responsibility for servicing the error condition.

82. (Cancelled)

83. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to return to the transaction terminal element to provide notification of whether a service person has accepted responsibility for servicing the error condition.

84. (Original) A system comprising a networked transaction terminal element and two or more servicing persons terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons terminals in the event of an error condition within the transaction terminal element, and

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in which the intelligent agent program is programmed to return to the transaction terminal element in the event that all associated service persons have failed to accept responsibility for servicing the error condition.

85. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to return to the transaction terminal element in the event that all associated service persons have rejected responsibility for servicing the error condition.

86. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is transmitted to a particular servicing person's terminal as determined by a

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prioritized list of terminals to visit maintained by the program.

87. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to visit the various servicing persons' terminals in succession until within an allotted period of time one of the servicing persons visited accepts responsibility for servicing the error condition that has occurred.

88. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to continue to visit the various servicing persons' terminals in succession until a specified condition has occurred.

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89. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to continue to visit the various servicing persons' terminals in succession until within an allotted period of time during a visit, a servicing person being visited accepts responsibility for servicing the error condition that has occurred.

90. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the intelligent agent program is programmed to continue to visit the various servicing persons' terminals in succession for a predetermined number of visits or until within an allotted period of time during a visit, a servicing person being visited accepts responsibility for servicing the error condition that has occurred.

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91. - 94. (Cancelled)

95. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element notifies the central server and the central server notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the central server provides further information concerning the error condition to a servicing person's terminal, to facilitate a decision as to whether a service person contacted will agree to accept responsibility for servicing the error condition that has occurred.

96. (Cancelled)

97. (Cancelled)

98. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element notifies one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the central server provides further information concerning the error condition to a



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servicing person's terminal, to facilitate a decision as to whether a service person contacted will agree to accept responsibility for servicing the error condition that has occurred.

99. (Original) A system comprising a networked transaction terminal element and a servicing person's terminal interconnected over a network, in which the servicing person's terminal notifies the transaction terminal element in the event that the servicing person accepts responsibility for servicing an error condition within the transaction terminal element.

100. (Original) A system comprising a networked transaction terminal element and a servicing person's terminal interconnected over a network, in which the transaction terminal element is notified in the event of a change in scheduled servicing of the terminal element.

101. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within the transaction terminal element, and in which a servicing person's acceptance of responsibility for servicing the error condition is communicated

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to the central server.

102. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within the transaction terminal element, and in which a servicing person's estimate as to when the error condition is likely to be serviced is communicated to the central server.

103. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within the transaction terminal element, and in which a servicing person's estimate as to when the error condition is likely to be serviced is communicated to the central server to allow proximity or availability based prioritization for service scheduling.

104. (Cancelled)

105. (Original) A system comprising networked transaction

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terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which one or more of the servicing persons' terminals are notified in the event of an error condition within a transaction terminal element, and in which the central server makes proximity or availability based prioritization for service scheduling among the servicing persons on hand, where such prioritization is communicated to one or more of the transaction terminal elements to determine a visitation order for intelligent agent programs that a transaction terminal element may launch.

106. (Original) A system comprising a networked transaction terminal element and a servicing person's terminal interconnected over a network, in which the servicing person's terminal is notified in the event of an error condition within the transaction terminal element, and in which the transaction terminal element is notified via a network communication when the servicing person has serviced the error condition, to allow updating of a terminal element error condition registry.

107. (Original) A system comprising a networked transaction terminal element, a central server and a servicing person's terminal interconnected over a network, in which the servicing person's terminal is notified in the event of an error condition

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within the transaction terminal element, and in which the central server is notified when the servicing person has serviced the error condition.

108. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the transaction terminal element launches a second intelligent agent program if the first one does not return within an allotted time period.

109. (Original) A system comprising a networked transaction terminal element and two or more servicing persons terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the transaction terminal element launches a second intelligent agent program if the first one returns to indicate that each associated service person has rejected or failed to accept responsibility for servicing the error condition that has occurred.

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110. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and in which the transaction terminal element is notified as a servicing person's terminal is visited by the program and the associated service person accepts, rejects or fails to accept responsibility for servicing the error condition.

111. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, where the servicing persons' terminals are scheduled to be visited by the program in an order indicated by a priority list that the program carries, and in which the transaction terminal element launches a second intelligent agent program if the first one fails to produce a service person accepting responsibility for servicing the error condition, where the transaction terminal element

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launches a second intelligent agent program with a priority list updated to reflect new information ascertained or received by the transaction terminal element after launching of the first intelligent agent program.

112. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, where the servicing persons' terminals are scheduled to be visited by the program in a preset order, and in which the transaction terminal element launches a second intelligent agent program if the first one does not return within an allotted time period, where the second intelligent agent program is programmed to visit the servicing persons' terminals in a different preset order.

113. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which the transaction terminal element launches an intelligent agent program onto the network to notify one or more of the servicing persons' terminals in the event of an error condition within the transaction terminal element, and

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in which the transaction terminal element is notified when a servicing person's terminal is no longer operative on the network, as may be determined by a servicing person's terminal logging off or failing to provide an anticipated communication or reply on the network.

114. (Original) A system comprising a networked transaction terminal element, a central server and a servicing person's terminal interconnected over a network, in which the transaction terminal element notifies the central server in the event a responsible service person fails to service an error condition within the transaction terminal element within an allotted period of time.

115. - 118. (Cancelled)

119. (Original) A method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where the servicing personnel are notified of servicing requirements in response to predictions based at least in part on information reported by the device in response to a query made over the network.

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120. (Original) A method of servicing an electronic device interconnected over a network that includes communication of servicing information over the network to servicing personnel, where information concerning the state of the device is provided by the device in response to a monitor agent program launched onto the network by a regional or central server, and where servicing requirements are predicted based at least in part on the information concerning the state of the device returned to the server by the monitor agent program.

121. (Original) A system comprising networked transaction terminal elements and a central server interconnected over a network, in which servicing requirements for a transaction terminal element are determined according to predictions made by the central server based on state information gathered from the transaction terminal element through launching of an intelligent agent program that successively visits and extracts information from transaction terminal elements and then returns to the central server with the extracted information.

122. (Original) A system comprising a networked transaction terminal element and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto the network, the log in process activates an



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agent handler routine in the servicing person's terminal for receiving and processing intelligent agent programs launched onto the network by the transaction terminal element.

123. (Original) A system comprising networked transaction terminal elements and two or more servicing persons' terminals interconnected over a network, in which when a transaction terminal element logs on to the network, the transaction terminal element is notified by a servicing person's terminal as to the network identity of a servicing person potentially available for servicing of the transaction terminal element.

124. (Original) A system comprising networked transaction terminal elements and two or more servicing persons' terminals interconnected over a network, in which when a transaction terminal element logs on to the network, a servicing person's terminal launches an intelligent agent program to notify the transaction terminal element as to the network identity of the associated servicing person who is potentially available for servicing of the transaction terminal element.

125. (Original) A system comprising networked transaction terminal elements and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's

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terminal logs onto or off of the network, the servicing person's terminal launches an intelligent agent program to successively notify transaction terminal elements of a change in the network identity of servicing persons potentially available for servicing of the transaction terminal element.

126. (Original) A system comprising a networked transaction terminal element, a central server and a servicing person's terminal interconnected over a network, in which when the transaction terminal element logs on to the network, the transaction terminal element is notified by the central server as to the network identity of servicing persons potentially available for servicing of the transaction terminal element.

127. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which when the transaction terminal element logs on to the network, the transaction terminal element is notified by the central server as to the network identity of servicing persons potentially available for servicing of the transaction terminal element, for purposes of establishing a list of servicing persons' terminals to be notified via a network communication in the event of an error condition occurring within the transaction terminal element.

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128. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which when the transaction terminal element logs on to the network, the transaction terminal element is notified by the central server as to prioritization data associated with servicing persons potentially available for servicing of the transaction terminal element, for purposes of establishing an order in which servicing persons' terminals are to be notified via a network communication in the event of an error condition occurring within the transaction terminal element.

129. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the central server is notified to enable notification to the transaction terminal element of a change in the network identity of servicing persons potentially available for servicing of the transaction terminal element.

130. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing

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persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the central server is notified to enable updating of a list of servicing persons' terminals to be notified via a network communication in the event of an error condition occurring within the transaction terminal element.

131. (Original) A system comprising a networked transaction terminal element, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto the network, the central server notifies the transaction terminal element as to prioritization data associated with the corresponding servicing person, for purposes of establishing an updated order in which servicing persons' terminals may be notified via a network communication in the event of an error condition occurring within the transaction terminal element.

132. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when the transaction terminal element logs on to the network, the central server launches an intelligent agent program to notify the transaction terminal element as to the network identity of

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servicing persons potentially available for servicing of the transaction terminal element.

133. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when transaction terminal elements log on to the network, the central server launches an intelligent agent program to successively notify the transaction terminal elements as to the network identity of servicing persons potentially available for servicing of the transaction terminal elements.

134. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a transaction terminal element logs on to the network, a servicing person's terminal launches an intelligent agent program to notify the transaction terminal element as to the network identity of the associated servicing person who is potentially available for servicing of the transaction terminal element, the intelligent agent program being first routed to the central server where it is checked and authorized before being transmitted to the transaction terminal element.

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135. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when transaction terminal elements log on to the network, a servicing person's terminal launches an intelligent agent program to successively notify the transaction terminal elements as to the network identity of the associated servicing person who is potentially available for servicing of the transaction terminal elements, the intelligent agent program being first routed to the central server where it is checked and authorized before being transmitted to the transaction terminal elements.

136. (Original) A system comprising networked transaction terminal elements, central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the servicing person's terminal launches an intelligent agent program to successively notify transaction terminal elements of a change in the network identity of servicing persons potentially available for servicing of the transaction terminal elements, the intelligent agent program being first routed to the central server where it is checked and authorized before being transmitted to the transaction terminal elements.

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137. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto the network, the log in process establishes associated servicing details which details are selectively communicated to the central server and one or more of the transaction terminal elements to facilitate efficiency of servicing by the associated servicing person.

138. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the central server is notified by the servicing person's terminal and the central server launches an intelligent agent program to notify one or more of the transaction terminal elements.

139. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the servicing person's terminal launches an intelligent agent program that first visits the central server where it acquires a list of transaction terminal elements to be visited, and then is launched to

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successively notify each of the transaction terminal elements on the list.

140. (Original) A system comprising networked transaction terminal elements, a central server and two or more servicing persons' terminals interconnected over a network, in which when a servicing person's terminal logs onto or off of the network, the servicing person's terminal launches an intelligent agent program that first visits the central server where it acquires a list of network addresses and ports of transaction terminal elements be visited, and then is launched to successively notify each of the transaction terminal elements represented on the list.

141. - 147. (Cancelled)

148. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

- a) using the server system to deliver, to a monitor intelligent agent, Monitor Agent,
  - i) a list of ATMs, and
  - ii) a diagnostic computer program;
- b) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM;
  - i) deliver the diagnostic computer program to



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the ATM;

ii) receive and store results of the diagnostic computer program after the ATM runs the program; and

iii) return to the server.

149. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

a) using the server system to deliver, to a monitor intelligent agent, Monitor Agent,

i) a list of ATMs, and

ii) a diagnostic computer program;

b) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM;

i) deliver the diagnostic computer program to the ATM;

ii) receive and store results of the diagnostic computer program after the ATM runs the program; and

iii) return to the server,

wherein the Monitor Agent comprises a data packet, having a format which includes

1) sender's network address,

2) addresses of the ATMs to be visited,

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- 3) the diagnostic program, and
- 4) a register to contain data obtained from the ATM.

150. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

a) using the server system to deliver, to a monitor intelligent agent, Monitor Agent,

- i) a list of ATMs, and
- ii) a diagnostic computer program;

b) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM;

i) deliver the diagnostic computer program to the ATM;

ii) receive and store results of the diagnostic computer program after the ATM runs the program; and

iii) return to the server,

wherein the Monitor Agent comprises a data packet having a format which includes

- 1) sender's network address,
- 2) addresses of the ATMs to be visited,
- 3) the diagnostic program, and
- 4) a register to contain data obtained from the ATM;

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- c) using the server to deliver, to a service intelligent agent, Service Agent,
  - i) a list of ATMs,
  - ii) names of human service technicians, and
  - iii) . technical abilities of the service technicians; and
- d) causing the Service Agent to visit the ATMs on the list in sequence and, at each ATM, deliver;
  - i) the names of the human service technicians, and
  - ii) the technical abilities of the service technicians.

151. (New) Method according to claim 150, wherein the format of the Monitor Agent is the same as that of the Service Agent.

152. (New) Method according to claim 148, wherein different lists of ATMs are delivered to the Monitor Agent at different times.

153. (New) Method according to claim 152, wherein different diagnostic computer programs are delivered to the Monitor Agent at different times.

154. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

a) using the server system to deliver, to a monitor intelligent agent, Monitor Agent,

i) a list of ATMs, and

ii) a diagnostic computer program;

b) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM;

i) deliver the diagnostic computer program to the ATM;

ii) receive and store results of the diagnostic computer program after the ATM runs the program; and

iii) return to the server,

wherein the Monitor Agent comprises a data packet, having a format which includes

1) sender's network address,

2) addresses of the ATMs to be visited,

3) the diagnostic program, and

4) a register to contain data obtained from the ATM;

c) using the server to deliver, to a service intelligent agent, Service Agent,

i) a list of ATMs,

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- ii) names of human service technicians, and
  - iii) technical abilities of the service technicians;
- d) causing the Service Agent to visit the ATMs on the list in sequence and, at each ATM, deliver;
  - i) the names of the human service technicians, and
  - ii) the technical abilities of the service technicians;
- e) at an ATM,
  - i) detecting an error condition;
  - ii) examining the abilities of the human service technicians and selecting a technician to handle the error condition; and
  - iii) delivering to an alert intelligent agent, Alert Agent, an address of the technician selected, and causing the Alert Agent to contact the technician selected.

155. (New) Method according to claim 150, and further comprising:

- e) at an ATM,
  - i) detecting an error condition;
  - ii) examining the abilities of the human

service technicians and selecting a group of technicians to handle the error condition;  
iii) ranking the technicians in the group;  
iv) delivering to an alert intelligent agent, Alert Agent, addresses of the group of technicians, and causing the Alert Agent to contact the technicians in the group in rank order, until a technician is found who makes a specified response.

156. (New) Method according to claim 155, wherein the Alert Agent, Monitor Agent, and Service Agent are all organized according to a common format.

157. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

- a) sending a first type of intelligent agent from a server to a group of ATMs, which agent obtains diagnostic information from the ATMs;
- b) sending a second type of intelligent agent from a server to a group of ATMs, which agent informs the ATMs of the identities of available service technicians; and
- c) sending a third type of intelligent agent from a malfunctioning ATM to a service technician,

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wherein all intelligent agents share a common data format.

158. (New) Method according to claim 157, wherein the first type of agent returns to the server, and delivers the diagnostic information to the server upon return.

159. (New) Method according to claim 157, wherein at least one ATM arranges the available technicians in rank order.

160. (New) Method according to claim 159, wherein the malfunctioning ATM causes the third type of agent to contact available technicians according to the rank order.

161. (New) Method according to claim 160, wherein the third type of agent stops contacting technicians when a specified response is obtained from technicians contacted.

162. (New) A system, comprising:

a) a server system and a group of associated Automated Teller Machines, ATMs;

b) means for

i) transferring from the server system to a monitor intelligent agent, Monitor Agent,

A) a list of ATMs and

- B) a diagnostic computer program; and
- ii) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM
  - A) delivering the diagnostic computer program to the ATM;
  - B) receiving and storing results of the diagnostic computer program after the ATM runs the program; and
  - C) returning to the server.

163. (New) A system, comprising:

- a) a server system and a group of associated Automated Teller Machines, ATMs;
- b) means for
  - i) transferring from the server system to a monitor intelligent agent, Monitor Agent,
    - A) a list of ATMs and
    - B) a diagnostic computer program; and
  - ii) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM
    - A) delivering the diagnostic computer program to the ATM;
    - B) receiving and storing results of the diagnostic computer program after the ATM



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runs the program; and

C) returning to the server,

wherein the Monitor Agent comprises a data packet having a format which includes

- 1) sender's network address,
- 2) addresses of the ATMs to be visited,
- 3) the diagnostic program, and
- 4) a register to contain data obtained from the ATM.

164. (New) A system, comprising:

a) a server system and a group of associated Automated Teller Machines, ATMs;

b) means for

i) transferring from the server system to a monitor intelligent agent, Monitor Agent,

A) a list of ATMs and

B) a diagnostic computer program; and

ii) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM

A) delivering the diagnostic computer program to the ATM;

B) receiving and storing results of the diagnostic computer program after the ATM

runs the program; and

C) returning to the server,

wherein the Monitor Agent comprises a data packet having a format which includes

- 1) sender's network address,
- 2) addresses of the ATMs to be visited,
- 3) the diagnostic program, and
- 4) a register to contain data obtained from the ATM;

c) means for

i) transferring

- A) a list of ATMs,
- B) names of human service technicians, and
- C) technical abilities of the service technicians

from the server system to a service intelligent agent, Service Agent; and

ii) causing the Service Agent to visit the ATMs on the list in sequence and, at each ATM, deliver;

- A) the names of the human service technicians, and
- B) the technical abilities of the

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service technicians.

165. (New) Apparatus according to claim 163, wherein the format of the Monitor Agent is the same as that of the Service Agent.

166. (New) Apparatus according to claim 164, wherein different lists of ATMs are delivered to the Monitor Agent at different times.

167. (New) Method according to claim 166, wherein different diagnostic computer programs are delivered to the Monitor Agent at different times.

168. (New) A system, comprising:

a) a server system and a group of associated Automated Teller Machines, ATMs;

b) means for

i) transferring from the server system to a monitor intelligent agent, Monitor Agent,

A) a list of ATMs and

B) a diagnostic computer program; and

ii) causing the Monitor Agent to visit the ATMs on the list in sequence and, at each ATM

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- A) delivering the diagnostic computer program to the ATM;
- B) receiving and storing results of the diagnostic computer program after the ATM runs the program; and
- C) returning to the server,

wherein the Monitor Agent comprises a data packet having a format which includes

- 1) sender's network address,
- 2) addresses of the ATMs to be visited,
- 3) the diagnostic program, and
- 4) a register to contain data obtained from the ATM;

c) means for

- i) transferring
  - A) a list of ATMs,
  - B) names of human service technicians, and
  - C) technical abilities of the service technicians

from the server system to a service intelligent agent, Service Agent; and

- ii) causing the Service Agent to visit the ATMs on the list in sequence and, at each ATM,

deliver;

A) the names of the human service technicians, and

B) the technical abilities of the service technicians;

d) means for detecting an error condition at an ATM;

e) means for examining, at the ATM, the abilities of the human service technicians and selecting a technician to handle the error condition;

f) means for delivering, at the ATM, an address of the technician selected to an alert intelligent agent, Alert Agent, and causing the Alert Agent to contact the technician selected.

169. (New) Apparatus according to claim 165, and further comprising:

d) means for detecting an error condition at an ATM;

e) means for examining, at the ATM, the abilities of the human service technicians and selecting a group of technicians to handle the error condition;

f) means for ranking the technicians in the group at the ATM;

g) means for

i) delivering, at the ATM, addresses of the

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group of technicians to an alert intelligent agent, Alert Agent, and

ii) causing the Alert Agent to contact the technicians in the group in rank order, until a technician is found who agrees to service the error condition.

170. (New) Apparatus according to claim 169, wherein the Alert Agent, Monitor Agent, and Service Agent are all organized according to a common format.

171. (New) Apparatus, comprising:

a) a server system and associated Automated Teller Machines, ATMs:

b) means for sending a first type of intelligent agent from the server system to a group of ATMs, which agent obtains diagnostic information from the ATMs;

c) means for sending a second type of intelligent agent from the server system to a group of ATMs, which agent informs the ATMs of the identities of available service technicians; and

d) means for sending a third type of intelligent agent from a malfunctioning ATM to a service technician,

wherein all intelligent agents share a common data format.

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172. (New) Apparatus according to claim 171, wherein the first type of agent returns to the server, and delivers the diagnostic information to the server.

173. (New) Apparatus according to claim 172, wherein at least one ATM arranges the available technicians in rank order.

174. (New) Apparatus according to claim 173, wherein the malfunctioning ATM causes the third type of agent to contact available technicians according to the rank order.

175. (New) Apparatus according to claim 174, wherein the third type of agent stops contacting technicians when a specified response is obtained from technicians contacted.

176. (New) A method of operating a server system and associated Automated Teller Machines, ATMs, comprising:

- a) sending a first type of intelligent agent from the server system to ATMs, which agent
  - i) obtains data concerning functionality of elements within the ATMs, and
  - ii) returns to the server system with the data;

- b) sending a second type of intelligent agent to ATMs, which agent informs the ATMs of identities of service technicians; and
- c) at an ATM, detecting an error condition and, in response, sending a third type of intelligent agent from the ATM to a server in the server system.

177. (New) Method according to claim 176, wherein the third type of intelligent agent contains a list of service technicians in rank order, and contacts technicians on the list in rank order, until a specified response is obtained from a technician.

178. (New) A method of operating a server system connected by a network to Automated Teller Machines, ATMs, comprising:

- a) equipping an intelligent agent with
  - i) network address of a sending server, and
  - ii) a list of ATMs to visit; and
- b) causing the agent to
  - i) travel the network and visit ATMs on the list, and
  - ii) return to the sending server after visiting the ATMs.

179. Method according to claim 178, and further comprising:



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- c) causing the agent to run a diagnostic program on the ATMs visited; and
- d) record results of the program, and deliver the results to the sending server upon return.